



World's Leading Developer of Industrial Pressure-Sensitive Systems



**Adhesives Research brings vision, innovation and performance
to pressure-sensitive adhesives and tape systems.**

Adhesives Research (AR) designs, develops and manufactures one-of-a-kind, customized products in pressure-sensitive adhesives (PSAs), tapes, specialty films, coatings, and laminates. As an independent, multinational company, we bring a unique passion to the process of creating the essential component that will satisfy your specific need and help your product development process to succeed in an efficient manner.



The precise solution for your bonding need.

When traditional fastening methods such as glues, rivets or spot welds fail to meet your needs, contact us to solve your bonding problems.

Many times, the precise bonding solution you seek can be found in our standard line or we can tailor a PSA to meet your exact requirements.

That's when our commitment to research and development makes us an invaluable extension of your technical department. By joining you in the design stage, you benefit from our expertise in process and manufacturing engineering and adhesive technologies.

Residential window manufacturers can clearly see the benefits of collaborations with us. We have been working in close partnership with the glass industry since 1981 to develop dependable pressure-sensitive adhesive systems for use with unplasticized vinyls, wood and painted aluminum.



Our company provides innovative solutions for a range of industries. The glass industry turns to us for pressure-sensitive foam muntin mounting tapes designed specifically for mounting grills, as well as for pressure-sensitive foam glazing tapes for applications like sealing glass in wood, vinyl, aluminum and plastic framing system.

We also provide specialized tapes to assist in the fabrication of veneers and other applications for the furniture market.

AUTOMOTIVE



Break your bond with traditional fastening methods.

Technical expertise and 50 years of experience have enabled us to engineer a huge variety of adhesives that can adhere to practically any surface or material under almost every environmental condition.

Our engineered solutions offer the appeal of customization, allowing you to choose from among a host of options, including the carrier, adhesive properties, tape thickness, single- or double-sided, heat activation, rubber-, acrylic- or silicone-based, and more.

The automotive industry reflects on the unique capabilities our PSAs bring to side mirror manufacturing every time their mirrors defrost – thanks to adhesive-coated tape that bonds the flexible heater to the back of the mirror.



Disk brake pad assembly, airbag inflator modules, and the flexible heaters bonded to the rear of driver and passenger side mirrors are just a few of the many adhesive applications in automobile manufacturing.

TOUCH SCREENS & DISPLAYS



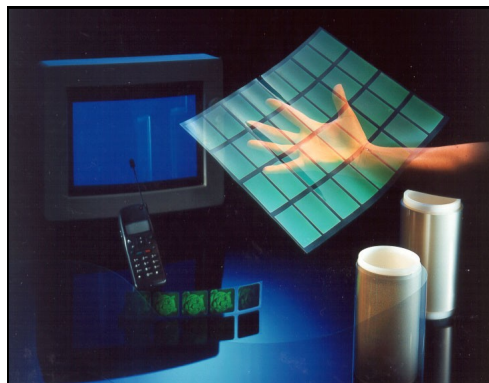
Custom solutions.

Adhesives Research offers a vast array of PSA tape products to solve your bonding needs, as well as an unmatched ability to customize a solution just for you.

Compared to traditional fastening methods, our pressure-sensitive adhesive products offer many cost-effective advantages to simplify your production process:

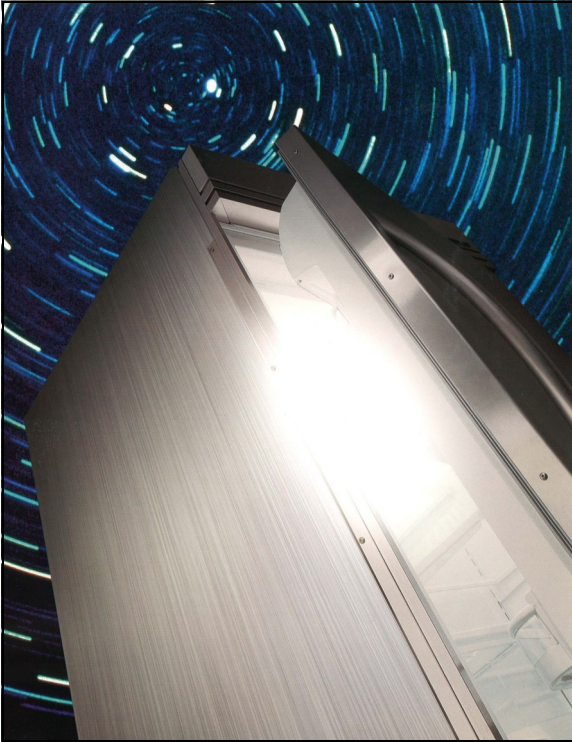
- Bond instantly
- Easily conformable
- Never messy
- Uniformly thick or thin
- Compliant under stress and temperature changes
- Die-cutable
- Available with a wide variety of adhesive properties

Our ARclear® optically clear adhesive, coated on optically clear film, plays a crucial role in flat panel display and touch screen technology.



Pressure-sensitive adhesives not only provide holographic optical elements here on earth, they also serve to bond the thermal blanketing found in satellites because of their ability to withstand extreme temperature ranges.

APPLIANCES



Work with a recognized leader.

Our approach is driven by the desire to be our industry's most effective developer and producer of specialized products. In addition to over 50 years of success on behalf of many of the world's largest industrial patterns, we were the first North American company in our industry to be certified for ISO 9001 and ANSI/ASQC Q9001-1994 quality assurance standards.

Our production facilities in Glen Rock, PA, U.S.A. and Limerick, Ireland are both certified to ISO 9001.

Foam tape screw anchors found on the inner panels of refrigerators and applications for applying decorative trim are among our many breakthrough pressure-sensitive adhesive applications for the appliance market.



The light contrast necessary for creating the hologram effect depends heavily on the background provided by our double-coated black polyester.



We have the solution to your unmet need.

We are an organization capable of seeing into a situation and sharing with you our people, technology, and processes.

If you do not see a solution to your problems, then contact us for our special out-of-the-box thinking and innovative problem-solving skills that characterize our daily work.

The solution you seek is only a phone call away.

With these goggles, the skiing is all downhill. Our foam tape enhances anti-fogging by bonding together the goggles' two lenses and sealing out all moisture.



With our state-of-the-art R&D facility, we have developed an ability to characterize and understand adhesives that is second-to-none.

Our Pressure-Sensitive Adhesives (PSA)

RUBBER-BASED ADHESIVES

Rubber-based adhesive systems are composed of natural or synthetic elastomers that have been tackified by the addition of various resins. These lower-cost adhesives have good tack and shear properties, and offer good adhesion to materials with both high and low surface energy. They are less suited for use under prolonged UV exposure, solvent contact or elevated temperature conditions.

ACRYLIC-BASED ADHESIVES

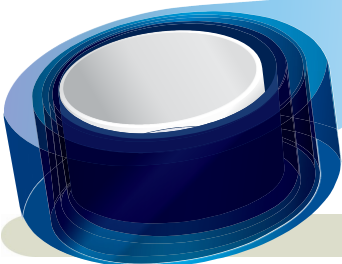
These systems are based on acrylic polymers. Acrylics are ideally suited for prolonged UV exposure and elevated temperatures, while offering solvent resistance and long-term aging stability. Usually more costly than rubber-based adhesives, acrylic systems can be compounded to have a good balance of tack, peel and shear, but are less effective on materials with low surface energy.

SILICONE-BASED ADHESIVES

Silicone adhesive systems combine the flexibility of silicone rubber with the temperature resistance of silicone resin. They offer the widest service temperature range, along with good resistance to a variety of solvents and to thermal/oxidative degradation. These systems have good adhesion to materials with low surface energy but exhibit lower tack and significantly higher cost compared to acrylics.

HEAT-ACTIVATED ADHESIVES

Heat-activated adhesive systems require a defined period of time at elevated temperatures (normally 180°F or higher) to achieve final bonding strength. Temperature, pressure and dwell time are used to affect a final cure and bond.



TAPES & ADHESIVES GUIDE

TRANSFER FILMS

Unsupported adhesive is coated directly onto a release liner, allowing transfer films to be the most flexible and conformable of all ARclad® and ARclear® bonding systems.

- Bonds with consistently thin bond line
- Laminates to open or cellular materials
- Bonds and splices to a variety of industrial substrates
- Conforms well to irregular surfaces



SINGLE-FACED

Single-faced tapes consist of a substrate or carrier that is coated on one side with an adhesive. ARclad® and ARclear® single-coated tapes are available either in selfwound rolls or with a release liner for ease of application.

- Ideal for over-lamination
- Cushioning
- Splicing



DOUBLE-FACED

Double-faced tapes have a carrier that is coated on both sides with an adhesive, eliminating heat and solvent cure cycles. The instant bonding capabilities of ARclad® double-coated tapes make them very conducive to automation and high-speed processing.

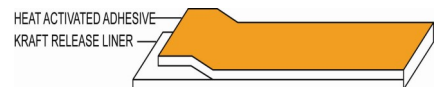
- Bonds rigid materials to irregular surfaces
- Compensates for thermal expansion and contraction
- Reduces sound, shock and vibration
- Offers ease of handling
- Allows use of two different adhesives per application



HEAT-ACTIVATED

Heat-activated tapes require heat and pressure to achieve final bonding to any surface. If the product has a heat-activated side with a pressure-sensitive adhesive on the other side, heat is necessary to activate the first surface. The liner is then removed and pressure applied to achieve adhesion to the second surface.

- Ideal for plasticized materials
- High ultimate bonding strength
- Conforms to irregular or textured surfaces



RUBBER-BASED ADHESIVES

PRODUCT	APPLICATION	FEATURES & BENEFITS	PRODUCT DESCRIPTION
DOUBLE-COATED FOAMS			
ARclad® IS-2108-11	Maximum gap filling ability, vibration attenuation, and cushioning tape suggested for reflectors, molded plastics, mirrors, signs, circuit boards and wall displays.	Extra thick foam for noise and vibration reduction and maximum gap-filling ability. Demonstrates aggressive tack, shear and adhesion to practically any surface.	A 1/8" (3.2mm) white, closed-cell, cross-linked polyethylene foam coated both sides with a rubber-based adhesive (CP-11FM). A kraft paper release liner is utilized.
ARclad® IS-2116A-11	Suggested for mounting tape for wire harness clips, reflectors, molded plastics, mirrors, signs, metals and wall displays where irregular or uneven surfaces are encountered.	High density foam reduces vibration and noise. Thicker foam for extra gap-filling. Demonstrates aggressive tack, shear and adhesion to practically any surface. Suitable for die cutting.	A 1/16" (1.6mm) white, closed-cell, cross-linked polyethylene foam coated both sides with a rubber-based adhesive (CP-11FM). A kraft paper release liner is utilized.
ARclad® IS-2132-11	Suggested for mounting tape for wire harness clips, reflectors, molded plastics, mirrors, signs, metals, wall displays and trim.	High density foam reduces vibration and noise. Demonstrates aggressive tack, shear and adhesion to practically any surface. Suitable for die cutting.	A 1/32" (0.8mm) white, closed-cell, cross-linked polyethylene foam coated both sides with a rubber-based adhesive (CP-11FM). A kraft paper release liner is utilized.
ARclad® IS-8526-11	Excellent mounting tape for molded plastic parts and ABS.	High density foam, adhesive tailored for specific adhesion to ABS.	1/32" (0.8mm) white, closed cell, cross-linked polyethylene foam coated with CP-11FM one side and CP-26 on the other. A kraft paper release liner is utilized.
SINGLE-COATED FOAMS			
ARclad® IS-1132	Suggested for die cut gaskets and seals where tolerances are tight and a thin caliper is required.	High density foam reduces vibration and noise. Outstanding tack, shear and adhesion. Suitable for die cutting.	A 1/32" (0.8mm) white, closed-cell, cross-linked polyethylene foam coated on side with a rubber-based adhesive (CP-11FM). A kraft paper release liner is utilized.
DOUBLE-COATED FILMS			
ARclad® IS-7535-12	High performance mounting and laminating tape. Bonds well to metals, plastics, polyester, polyethylene, polystyrene, urethane foams and materials with irregular surfaces. Suitable for die cutting.	Adheres well to low energy surfaces. Bondable to surfaces covered with light machine oil.	A 0.5 mil (0.01mm) polyester carrier coated both sides with a rubber-based adhesive (CS-14). A polycoated kraft paper release liner is utilized.

Adhesives which can be readily customized:

CP-11FM Aggressive rubber-based adhesive
 CS-14 Indirect food contact approved adhesive
 CP-26 Aggressive rubber-based adhesive formulated specifically for ABS





ACRYLIC-BASED ADHESIVES

PRODUCT	APPLICATION	FEATURES & BENEFITS	PRODUCT DESCRIPTION
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DOUBLE-COATED FILMS

ARclad® IS-5913-10	Outstanding general purpose tape well suited for bonding metals, plastics, wood, glass and painted surfaces. Suggested for signs and nameplates.	Balanced peel and shear properties. Resistant to UV, moisture, mild acids, oils and greases. An excellent choice for a variety of applications. Suitable for die cutting.	A 1.0 mil (0.025mm) polyester film coated both sides with acrylic adhesive. A kraft paper release liner is utilized.
ARclad® IS-7761	Suggested for assembly of electronics and electrical equipment. Bonds well to engineering plastics and metals.	Good peel strength coupled with outstanding temperature and chemical resistance. High shear PSA tape is easy to slit, die cut and apply.	A 1.0 mil (0.025mm) polyester carrier coated both sides with acrylic adhesive. A kraft paper release liner is utilized.
ARclad® IS-8314-10	Good choice for immediate, destructible bonds. Also suggested for nameplate and most mounting applications. Our best acrylic tape for bonding to low surface energy materials.	Heavy mass of aggressive adhesive is ideal for adhering to foams, rubbers and other low surface energy materials. Suitable for die cutting.	A 1.0 mil (0.025mm) polyester film coated both sides with an acrylic adhesive. A kraft paper release liner is utilized.
ARclad® IS-8901	Good choice for immediate, destructible bonds. Suggested for nameplate and most mounting applications. Our best acrylic tape for bonding to low surface energy materials.	Heavy mass of aggressive adhesive is ideal for adhering to foams, rubbers and other low surface energy materials. Suitable for die cutting. Black carrier for aesthetics on black surfaces.	A 1.0 mil (0.025mm) black polyester film coated both sides with an acrylic adhesive. A kraft paper release liner is utilized.

TRANSFER ADHESIVES

ARclad® IS-7418	Suggested for nameplates, decorative trim, foams and automotive interiors.	Good adhesion to a wide variety of surfaces. Excellent oxidation and UV resistance for interior and exterior applications. Suitable for die cutting.	A 2 mil (0.05mm) layer of acrylic adhesive coated onto a poly-coated kraft paper release liner.
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DOUBLE-COATED FOAM TAPES

ARclad® IS-6262-72	Suggested as mounting tape for wire harness clips, reflectors, molded plastics and metals.	High density foam reduces noise and vibration. High shear and excellent tack. Good resistance to shock, UV and humidity. Tear-resistant release liner.	A 1/32" (0.8mm) black, closed-cell, cross-linked polyethylene foam coated both sides with acrylic adhesive. A blue polyethylene release liner is utilized.
ARclad® IS-8430-11	Same as ARclad® 8471-11 but white color offers an invisible bond line.	High density foam reduces noise and vibration. Extremely aggressive acrylic gives high bond strength and rapid wet out. Excellent UV and moisture resistance. Suitable for die cutting.	1/32" (0.8mm) white, closed-cell, cross-linked polyethylene foam coated both sides with acrylic adhesive. A kraft paper release liner is utilized.
ARclad® IS-8471-11	Suggested for automotive mirror assemblies (interior and exterior), nameplates, wire harness clips, wall displays, signs and decorative trims.	High density foam reduces noise and vibration. Extremely aggressive acrylic gives high bond strength and rapid wet out. Excellent UV and moisture resistance. Suitable for die cutting.	A 1/32" (0.8mm) black, closed-cell, cross-linked polyethylene foam coated both sides with acrylic adhesive. A kraft paper release liner is utilized.

SINGLE-COATED FOILS

ARclad® IS-5795-6	Suggested for die cut EMI/RFI shields for computers, cellular phones, televisions and automotive electronics.	Economical choice suggested for less demanding EMI applications. Good heat resistance. Easy to die cut and apply.	A 3 mil (0.076mm) aluminum foil coated with acrylic adhesive. A kraft paper release liner is utilized.
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Adhesives which can be readily customized:

- AS-98 General purpose aggressive adhesive
- AS-102 Very polar, high performance acrylic designed to withstand high temperature & hydrocarbon solvents
- AS-105 Very high shear adhesive used in automotive applications
- AS-181 Multi-purpose aggressive adhesive better suited for intricate die-cutting
- AS-195 High performance optical adhesive



SILICONE-BASED ADHESIVES & HEAT-ACTIVATED ADHESIVES

PRODUCT	APPLICATION	FEATURES & BENEFITS	PRODUCT DESCRIPTION
DOUBLE-COATED FILMS SILICONE-BASED ADHESIVES			
ARclad® IS-8458	Suggested for flexible circuits, gaskets and flexible heaters where a wide service temperature range is required.	Withstands high & low temperature extremes. Good adhesion to a wide variety of surfaces. Demonstrates excellent UV & solvent resistance. Tear-resistance release liners.	A 1.0 mil (0.025mm) polyetherimide film coated both sides with silicone adhesive. Two polyester release liners are utilized.

TRANSFER ADHESIVES

ARclad® IS-7876	Suggested for flexible circuits, gaskets and flexible heaters when more surface irregularity is present or faster wet out is required.	Withstands high and low temperature extremes. Good adhesion to a wide variety of surfaces. Demonstrates excellent UV & solvent resistance. Tear-resistant release liners	A 2 mil (0.05mm) layer of silicone adhesive coated between two polyester release liners.
ARclad® IS-8026	Suggested for flexible circuits, gaskets and flexible heaters where a thin bond line is required.	Good high and low temperature resistance. Good adhesion to a wide variety of surfaces. Demonstrates excellent UV & solvent resistance. Tear-resistance release liners.	A 1.0 mil (0.025mm) layer of silicone adhesive between two polyester release liners.

Adhesives which can be readily customized:

SR-11 Very high temperature adhesive, slight yellow
SR-18 High temperature adhesive, clear, high bond strength
SR-22 High temperature adhesive, clear, higher shear

HEAT-ACTIVATED ADHESIVES

ARclad® IS-7970-39	Good choice for bonding foams, corks, felts, and most metals and plastics. Perfect choice for plasticized PVC.	Excellent plasticizer resistance. Strong, durable bonds. Activation temperature, pressure and dwell time can be varied. Suitable for die cutting.	A 1.0 mil (0.025mm) layer of heat-activated adhesive coated onto a kraft paper released liner.
ARclad® IS-8027-39	Heavy mass of adhesive for maximum penetration into fabrics and porous, irregular surfaces.	Excellent plasticizer resistance. Strong, durable bonds. Activation temperature, pressure and dwell time can be varied. Suitable for die cutting.	A 6.0 mil (0.152mm) layer of heat-activated adhesive coated onto a kraft paper released liner.
ARclad® IS-8289-39	Heavy mass of adhesive is an excellent choice for bonding fabrics, felts and porous materials where irregular surfaces are present.	Excellent plasticizer resistance. Strong, durable bonds. Activation temperature, pressure and dwell time can be varied. Suitable for die cutting.	A 5.0 mil (0.127mm) layer of heat-activated adhesive coated onto a kraft paper released liner.

HEAT-ACTIVATED PSAs

ARclad® IS-8306M	Good choice for PVC bumpers, foams and irregular surfaces.	Excellent plasticizer resistance on the heat-activated side. General purpose acrylic adhesive features a good balance of tack and shear. Suitable for die cutting.	A 0.5 mil (0.0127mm) polyester film coated one side with a heat-activated adhesive and, on the other, an acrylic pressure-sensitive adhesive. A kraft paper released liner is utilized.
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Adhesives which can be readily customized:

HA-3 Crosslinked polyester based heat seal
HA-7 Phenolic adhesive
HA-24 Thermoplastic polyester based heat seal



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